



Fall 1997

Blue Ribbon Advisory Panel Holds Final Meeting; Adopts Permit Streamlining Resolution

The Blue Ribbon Advisory Panel for Lake Michigan issues held its fifth and final meeting August 29 in Portage. Prominent on the agenda was consideration of a resolution to address permit streamlining.

At its April meeting, the panel had prepared a draft resolution to consolidate state agencies which do environmental permitting. During the August meeting, the panel agreed to emphasize consolidating functions rather than bureaucracies. Julie Murphy of Amoco said that while combining agencies might be a worthy goal, it might also prove difficult to accomplish. J.B. Smith, Hammond attorney, said encouraging agency activities which would promote joint permit applications was likely to be more productive than focusing upon combining agencies. Robert Bilheimer of Bethlehem Steel said the thrust should be to consolidate permit processes not agencies.

The April draft had focused primarily on state agencies. The panel also determined to amend the draft to include local and federal agencies as well. In its

final resolution, the panel asked the Indiana Natural Resources Commission to urge that Governor Frank O'Bannon:

(1) Implement a joint permit application for greater efficiency by:

(a) Involving all federal, state, and local regulating authorities.

(b) Assigning a work team to pursue joint applications.

(2) Consolidate environmental permitting processes in the State of Indiana.

During the meeting, panel members also received communications from Gary Manesto, Chief of the Regulatory Branch for the Detroit District, U.S. Army Corps. Manesto said he gave his "whole hearted support" to the panel's "initiative to streamline the permit process in Indiana. Any increased efforts at inter-agency co-

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ordination which result in the sharing of information resulting in better, more-informed decisions is a worthwhile effort.” Manesto also emphasized that streamlining efforts must be accomplished in a way which assured “the environmental protection that the citizens of Indiana are entitled to.”

The panel also received a briefing on the new methodology for electronic filing of DNR permit applications on the Internet. *See Permit Filing (on pg.6) on the Net.* Bill Theis described the online application process as a “fantastic” development. Chuck Siar asked whether materials available from the Army Corps might also be included. Andrea Gromeaux of DNR’s division of water said that linkages to other agencies could be and were being developed.

Ordinary High Watermark

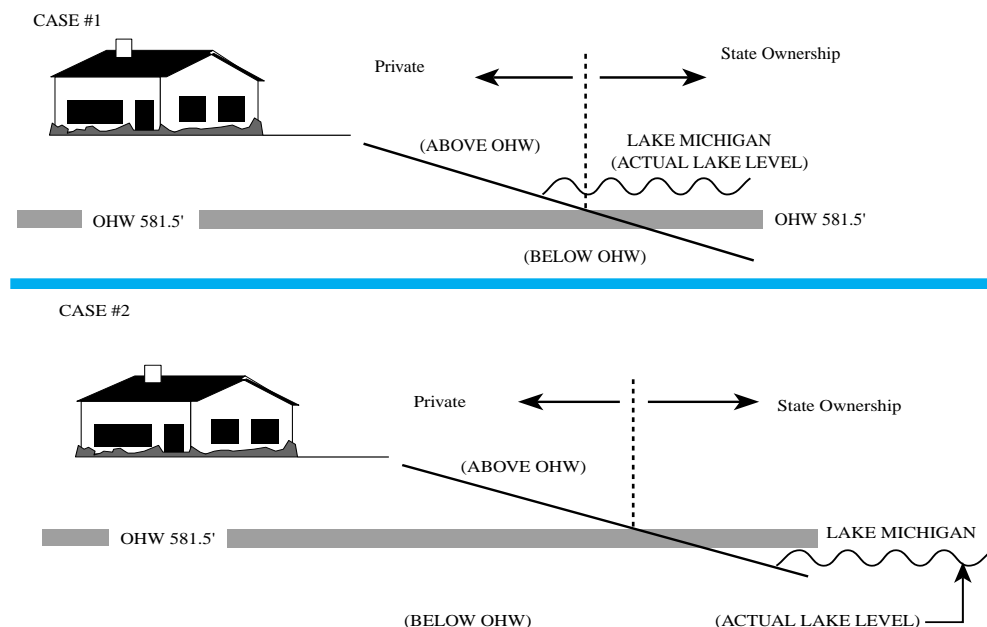
Lake Michigan is legally “navigable,” a status which is important both to regulatory matters and to ownership. The bed of Lake Michigan is owned by the four states which share its shoreline: Michigan, Wisconsin, Illinois, and Indiana. The portion of Lake Michigan located within Indiana is owned by the state, and held in trust for its citizens, through what is sometimes called the “public trust doctrine.” This doctrine will be discussed in a later issue of *SHORELINES*.

The dividing line on Lake Michigan between public ownership and private ownership is the ordinary high watermark. In general terms, “ordinary high watermark” (or “OHW”) is the line along the edge of a river or lake, physically evidenced by water-level fluctuations. The line may be impressed on the banks, result from changes in character of the soil, shown by the limits of dry-land plants, or marked with litter or debris.

For the Indiana portion of Lake Michigan, the US Army Corps of Engineers and the Indiana Natural Resources Commission have both set 581.5 feet, IGLD (1985) as the elevation of the ordinary high watermark. The same el-

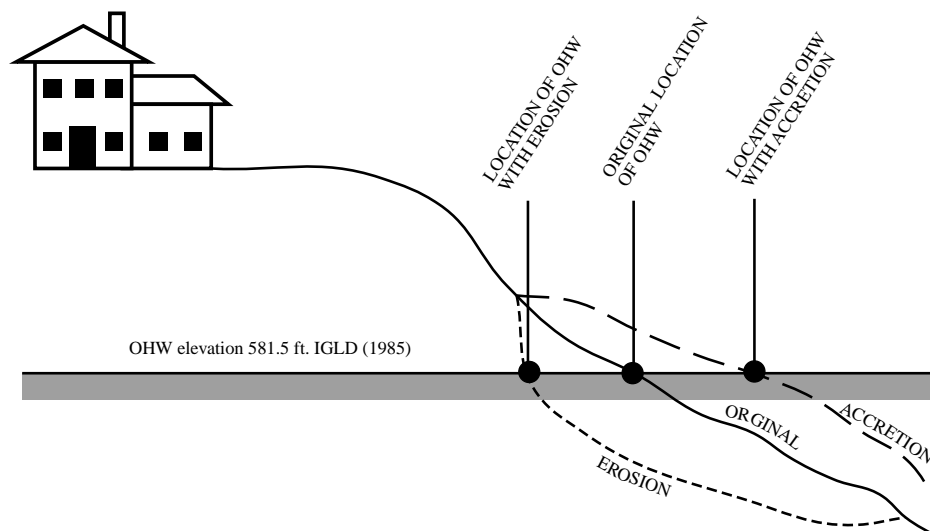
elevation can be described as 582.252 feet, NGVD.

Although the elevation of Lake Michigan changes, the elevation of its OHW does not. When the lake is high, the OHW is underwater. (See Case 1.) When the lake level is low, public ownership extends some distance up the beach. (See Case 2.) Regulatory authority may be referenced to the ordinary high watermark, but there are instances when authority extends outside the OHW. For example, boating laws and fishing laws are enforced outside the boundaries of the OHW when the lake is high.



While the elevation of the OHW does not change, the physical location of the OHW moves with the erosion and deposit (called “accretion”) of sand along the shoreline due to natural causes. Ownership moves as the line moves. (See Case 3.) This principle has not always been applied by the courts, however, if sand erosion and accretion result from manmade causes. Examples of manmade causes include excavations or the erection of piers, seawalls, and similar structures.

CASE # 3 MOVEMENT OF LOCATION OF OHW



The OHW for the navigable tributaries of Lake Michigan varies, depending both upon the stream and the location on the stream. Moving away from Lake Michigan, the OHW of a river or stream is at an ever-higher elevation. Portions of the Grand Calumet River, the Little Calumet River, and Trail Creek are legally navigable. Manmade waters may also be navigable. In Northwest Indiana, these include the Portage Burns Waterway (Burns Ditch) and the Indiana Harbor and Ship Canal.

Northwest Indiana Brownfield Redevelopment Project

Last year, matching \$200,000 grants from EPA and IDEM gave backing to the Northwest Indiana Brownfield Redevelopment Project. Brownfields are abandoned or under-used property where expansion or redevelopment is hindered by real or perceived environmental contamination, said Dana Reed Wise, IDEM brownfields coordinator. They can include industrial or commercial properties.

Participants in the Northwest Indiana Brownfield Redevelopment Project are environmental and community organizations, lending institutions, realtors, industry, labor, and public and private agencies. According to Ted Smith who is coordinating the activities of the Project, "It's a little bit of an experiment in that there's a more active role" by local citizens. "We're trying to do brownfields redevelopment in the most community intensive way possible."

The Project has three goals: (1) to identify and remove threats to the health and safety of residents from brownfield sites; (2) to restore brownfields to productive use by appropriate cleanup; and, (3) to create sustainable economic opportunity with new jobs consistent with environmental protection. One of the early stages of the Project was to choose one site each in Hammond, East Chicago, and Gary to be focal points for implementing these goals.

Before environmental problems can be corrected on a site, there has to be a good idea of what those problems are. An important role for Project funding is to perform environmental assessments. A Phase II assessment has been completed on West Point Industrial Park, the site chosen in Hammond, and the results are encouraging. EPA loaned a "geoprobe," a piece of equipment capable of taking water and soil samples without the use of a screw auger, to help perform the assessment at West Point site. According to Smith, "We try to clarify what the site conditions really are. By no

means is every brownfield site a Superfund site."

The American Steel Foundries property was the initial site chosen for the Project in East Chicago. The property has been appraised, and discussions are underway on whether to go forward. Due to complex ownership issues and tax delinquencies attached to the Gary property, fieldwork has not yet begun there.

Smith said the Project is working closely with IDEM's Voluntary Remediation Program and is already looking beyond the three original properties. "We want the cities to be positioned, so when opportunities arise, they can take advantage of them." An inventory of brownfield sites, which might become available for redevelopment, is being assembled in Gary.

In East Chicago, the Project is also assisting Industrial Scrap, an aluminum and steel recycling facility, in assessing the possibility of expanding onto an adjacent ten-acre brownfield. A Phase II site assessment was conducted at this site, and preliminary results look promising.

New Indiana Legislation Targets Brownfield Revitalization

***by Kathleen G. Lucas
Bose McKinney & Evans***

With the passage of Senate Enrolled Act 360, the 1997 Indiana General Assembly adopted new concepts and changed others, hoping to encourage the redevelopment of contaminated sites. Often called the "brownfields bill," the legislation provides incentives for development through financial assistance and protection from liability under specified circumstances.

The philosophy of the legislation is apparent from the definition of brownfields. In IC 13-11-2-19.3, "brownfield" means an industrial or commercial parcel of real estate that is abandoned, inactive, or may not be operated at its appropriate use, and upon which

expansion or redevelopment is complicated, because of the actual or perceived presence of a hazardous substance or petroleum released into the surface or subsurface soil or groundwater that poses a risk to human health and the environment.

Supporters of the bill emphasized the benefits of encouraging private parties to invest in these underutilized areas so they may be restored to productive use. The goals are to provide jobs and eventually to restore tax revenues to areas needing them the most.

Effective July 1, a person may request a local body to designate an area as a "brownfield revitalization zone." The applicant must submit a statement of public benefits, which includes a description of the proposed remediation and redevelopment, an estimate of the number of jobs created or retained, and an estimate of the value of the project. The designating body may establish administrative fees and standards "reasonably related to accomplishing the purposes" of the new law. A public process is provided to assist in evaluating the benefits of creating the zone, applying a number of factors that must be satisfied. Among other requirements, the project must meet the criteria developed by the Indiana Department of Environmental Management and must be eligible to successfully obtain a certificate of completion under IDEM's Voluntary Remediation Program. An appeal process is provided for a person aggrieved by the designation, which is heard by a local judge.

Following the designation of an area as a brownfield revitalization zone, a person may apply for property tax deductions under terms specified in the legislation. These assessed valuation deductions may be granted for periods of three, six, or ten years. The amount is calculated by the increase in valuation resulting from the project, multiplied by a percentage based on the deduction period and year of the deduction.

In addition to the tax deductions, financial assistance is available to politi-

cal subdivisions from the new Environmental Remediation Revolving Loan Fund established under IC 13-19-5. The Fund is administered by the Indiana Development Finance Authority, which manages "all aspects of the program." Responsibilities include preparing and providing information, negotiating agreements and submitting them to the state Budget Agency for approval, reviewing proposed projects to insure compliance with criteria established by rule or guidance document, inspecting projects, and preparing annual reports to the Governor and the General Assembly.

Another important component of SEA 360 involves changes to Indiana's environmental liability scheme. In an effort to encourage redevelopment of property that may be abandoned or underused because of the fear of environmental liability, the General Assembly adopted a "fair share" or "proportionate share" liability concept under IC 13-30-9.

The purpose of the liability modification is to more fairly allocate cleanup costs among those who actually are responsible for the contamination found on the property. The new law provides that entities which did not cause or contribute to the contamination are no longer jointly and severally liable to pay for the cleanup. Critics may question how we will pay for the "orphan share" if we reduce the burden on innocent owners and operators. The theory is that by replacing "retroactive" and "joint and several" liability under Indiana law with a system that uses equitable factors to define who did, and who did not, contribute to the contamination, more brownfields will be purchased for investment or development. The view is to more evenly distribute resources to include areas previously marred by environmental blight.

What's on Shore next:

Great Lakes water level controls! See Winter 97 issue of Indiana Shorelines

Rare Black Soil

Prairie Saved

by Paul M. Kohlhoff

Executive Director,

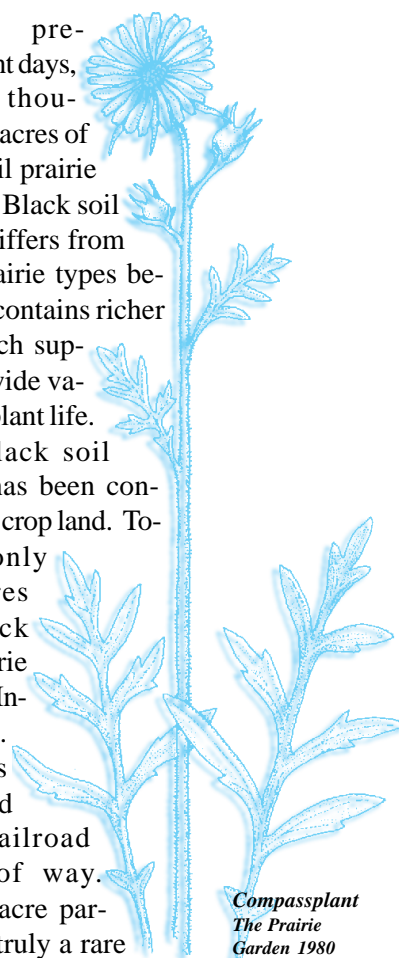
Shirley Heinze Environmental Fund

On a late summer day in 1986, Keith Board, an industrial arts teacher and amateur botanist, was driving through Hobart. He spotted a lonely "compass plant" growing on the shoulder of the road. Upon further investigation, he discovered a 36 acre remnant of rare black soil prairie that once predominated the area.

In pre-settlement days, tens of thousands of acres of black soil prairie existed. Black soil prairie differs from other prairie types because it contains richer soil which supports a wide variety of plant life. Most black soil prairie has been converted to crop land. Today, only 300 acres of black soil prairie exists in Indiana. Most is situated along railroad rights of way. The 36 acre parcel was truly a rare find. Botanists have

identified 178 native plant species including four state listed endangered plants at the site. Ironically, the prairie is located in the middle of a city surrounded by two apartment complexes, a golf course, and a railroad track.

In 1995, the Shirley Heinze Environmental Fund, a non-profit land preservation trust, began a concerted effort to acquire the prairie, later named the Cressmoor Prairie. At the time, the owner



*Compassplant
The Prairie
Garden 1980*

of the prairie was considering an offer to sell to a developer. Fortunately, several trustees of the Heinze Fund took the owner on a guided tour of the prairie and showed her the remarkable variety of plants growing there. Prior to this, the owner had always referred to the property as just another "weed patch."

The Cressmoor Prairie was purchased with financial support from the Indiana Heritage Trust Fund, which raises funds from the sale of environmental license plates in Indiana, and the Indiana Chapter of The Nature Conservancy. Members of Hobart Middle School's Clean World Association also helped by raising \$1,000 by sponsoring school dances and recycling programs.

In October 1996, the Cressmoor Prairie was dedicated to the State of Indiana as a nature preserve in a public ceremony. The prairie was formally dedicated by the Indiana Natural Resources Commission in August 1997.

The Heinze Fund continues to own and manage the preserve under a management agreement with the DNR's Division of Nature Preserve. Future plans include a parking lot and interpretive center. For additional information, contact the Shirley Heinze Environmental Fund, 444 Barker Road, Michigan City, IN 46360 or call (219)879-4725.

Great Lakes Commission Adopts Resolution to Address Beach Closings

During its October 2 meeting in Chicago, the Great Lakes Commission adopted a resolution directed to beach closures resulting from bacterial contamination. The resolution was presented by Peter McCarthy, commission member and Director of the Port of Indiana.

The resolution encourages the eight Great Lakes states "to work with their local jurisdictions to review Great Lakes beach water quality monitoring and analysis activities with the objective of ensuring more consistency in methods among

these intrastate jurisdictions as well as between adjoining states.” In addition, the resolution indicated the commission would “investigate the feasibility of uniform standards for beach closures and advisories among all Great Lakes states and provinces.”

The commission acted after reviewing EPA surveys showing an average of 17% of the 582 beaches along the Great Lakes were closed at least once each year for the period 1981 through 1994. A commission report reflected that water quality monitoring and analysis activities vary among states and jurisdictions within states. “Procedures for beach closures and advisories also vary” and can result in public uncertainty. “For example, if jurisdiction A closes its beach but nearby jurisdiction B does not even though bacteria counts at its beach may be similar, the public perception is that the beach at B is a healthier and better place.”

Indiana was cited as a model local initiative. “The State of Indiana is tackling this issue presently through the creation” of the Interagency Task Force on *E. coli*. The commission noted that Northwest Indiana beaches draw “more than 2 million people a year.”

Indiana 1997 Beach Report Card

Indiana Lake Michigan beaches monitored for bacterial contamination by the Indiana Dunes National Lakeshore were open to swimming this season about as frequently as in the last five years. That was the news received by the Interagency Task Force on *E. coli* at its September 9 meeting. According to Anita Arends of the National Lakeshore, until the Labor Day weekend, there were fewer closings than in previous years.

Arends said before the Labor Day weekend, six beaches showed *E. coli* counts above the water quality standard for recreational waters a total of 10 times. The standard is for full body contact and is set at 235 organisms for 100 milliliters of water. The testing for the Labor Day weekend, however, resulted in eight ad-

ditional closings.

The National Lakeshore sampled the following beaches this year each Thursday between Memorial Day and Labor Day:

National Lakeshore Beach Closure Dates

West	6/27, 7/18, 8/29
Porter	8/29
Kemil	8/29
Lakeview	7/18, 8/29
Central	8/29
Mt. Baldy	8/29
Ogden Dunes	6/27, 7/25

Non-National Lakeshore Beach Closure Dates

Marquette	6/27, 7/11, 7/18
State Park East	6/27, 8/29
State Park West	7/25, 8/29
Dune Acres	None

Beach Closures (Memorial Day through Labor Day)

1997	18
1996	10
1995	10
1994	2
1993	25
1992	22

The high counts of *E. coli* reported over Labor Day weekend have added a twist to the direction many have looked to as a precursor to contamination. Although studies have not yet proven the theory, heavy rain events seemed to coincide with beaches being closed to swimming. In the 24 hours prior to sampling on August 28, 1997, no rainfall was recorded in Northwest Indiana, yet *E. coli* counts were at their highest level of the summer.

The Interagency Task Force on *E. coli*, part of Indiana’s Healthy Beaches Initiative, is a voluntary consortium of researchers, managers, academia, and regulators searching for causes and solutions to the bacterial contamination of swimming waters at Indiana Lake Michi-

gan beaches. For additional information on the Healthy Beaches Initiative, including National Lakeshore sampling data, visit <http://www.dnr.state.in.us/lakemich/beach.htm>.

National Healthy Beaches Symposium Held at Indiana Dunes State Park

On August 7, roughly 100 scientists, health professionals, government officials, and other interested citizens met for the National Healthy Beaches Symposium. Sponsored by the Illinois-Indiana Sea Grant Program, in cooperation with the Indiana Interagency Task Force on *E. coli*, the symposium was held at Indiana Dunes State Park.

The symposium addressed bacterial contamination of swimming waters, both in the Great Lakes and salt water. Speakers represented the U S Great Lakes Shipping Association, the US Coast Guard, U S EPA, the City of Toledo, the City of Los Angeles, the Indiana Epidemiology Center, and the Indiana Port Commission.

Burt Jones of the University of Southern California described research and community efforts directed to stormwater runoff into Santa Monica Bay, California. Greg Steele, Indiana State Epidemeologist, described the health ramifications of swimming in waters contaminated with various strains of *E. coli* bacteria. Richard Whitman, U.S. Geological Survey, outlined research into possible bacterial sources on Dunes Creek, a small stream which flows into Lake Michigan at the site of Indiana Dunes State Park. Rick Hoffman, Beach Health Program Leader for the U.S. Environmental Protection Agency, outlined the EPA’s Beach Environmental Assessment, Closure, and Health program (“BEACH”).



Richard Whitman, U.S. Geological Survey, describes his research on Dunes Creek near its mouth on Lake Michigan. In background: Dunes State Park Pavilion, site of the National Healthy Beaches Symposium.

A panel reviewed efforts by groups in California, Ohio, and Indiana to address beach closings on a local basis. Another panel looked at the role of pleasure craft and commercial vessels sailing the Great Lakes. Advances in techniques for *E. coli* analysis were described by Evert Ting, Purdue University, Calumet. Amira Loney of IDEM and Danielle Livinghouse of the LaPorte County Health Department described the development of uniform testing procedures by the Interagency Task Force.

Several of the speakers prepared reports for the symposium. Now available from SHORELINES are Rhae Giacoma and Eric Reeves, U S Coast Guard, "Making Sure that What Comes Out of the Ships Doesn't Stink: Marine Sanitation Devices in the Great Lakes," and Dawn Deady, "The Healthy Beaches Initiative in Indiana." These and other reports are being compiled by Illinois-Indiana Sea Grant for later distribution.

Filing Applications On-line

Homeowners and businesses who need permits to construct along Indiana's streams and lakes can now apply on-line through the Internet, Department of Natural Resources Director, Larry Macklin announced in early September. The DNR is one of the first states in the country to accept electronic permit applications. "Applying on-line to construct in the floodway or on lakes is easy and it is fast. A computer program helps people file the application correctly the first time, enabling DNR staff to reduce the permit processing time by up to one month," Macklin said.

Applications can be filed by completing the form found on the agency's Division of Water homepage at <http://www.ai.org/dnr/water>. Directions are included on the application form, and a 150-page on-line manual provides the applicant with definitions and examples. The web site also provides users with instant access to a database of more than 13,000 permit applications filed with DNR during the past 10 years.

The permit application database is updated at each phase of the application review process. Applicants can track their application by using a personal computer to tap into the database. The database is updated with available information every 24 hours.

Permit streamlining is an issue raised in the 1995 public work group process and an issue of focus by the Blue Ribbon Advisory Panel. Input from them contributed to the progress of on-line application filing made by DNR.

Indiana Shoreline Erosion

Shoreline erosion is a persistent issue along portions of Indiana's Lake Michigan coastline. When the lake is high, as it was this summer, problems are more frequent. Erosion of varying consequence was experienced from the Lakefront Park and Sanctuary ("migrant birdtrap") west of the Hammond Marina, to Ogden Dunes, to Beverly Shores, to Mt. Baldy just west of Trail Creek.

Steve Davis is DNR's Lake Michigan Specialist. Located in Michigan City, he deals with shoreline erosion on a daily basis. Davis reflects the "biggest shoreline erosion problem on Indiana's coast is the presence of permanent structures. Building coastal structures disrupts natural coastal processes." He acknowledges, however, there are important reasons for many of these structures. "Some are for navigational purposes, and there can be important economic or recreational reasons for these structures."

Davis gives an example. "The Small Boat Harbor at the mouth of Burns Ditch (Portage Burns Waterway) was built in the mid-1980s for boating safety." Boats entering or leaving the Waterway for the open waters of Lake Michigan occasionally capsized during storms because of the shallow waters near the lakeshore. "A safe entrance was needed, and the Small Boat Harbor helped meet that need. But the structures built for the Harbor can also create problems of shoreline erosion. It's kind of a dilemma."

Houses along the shoreline are also potential problems, both in terms of threats to them directly by shoreline erosion and because of the unintended consequences seawalls and other shore protection structures can have. "Before European settlement, Native Americans could simply move their camps if erosion took place. They've tried something kind of like that in Michigan." There state law discourages building permanent homes "too close to the bluff top," but a house can be "closer than set-back requirements where the house is capable of being moved."



Seawall at Ogden Dunes 1997

Davis said another concern is for the potential of a dredging activity to have a "negative impact on the shoreline of Lake Michigan." A proposal to mine an offshore sandbar from the bottom of the lake to build a wider beach, for example, might cause more problems than it solves. "The outer sandbar trips the biggest waves. Removing it would allow a lot more energy to reach the newly created beach and cause more problems to both the permit applicant and to his neighbors."

Hard structures orientated perpendicular to shorelines (such as "groins")

can result in strong currents digging a trench heading out offshore. “Current flowing parallel to the shoreline is forced to make a right turn, causing scouring and movement of sand outward.” Davis says, “It’s like when you put your thumb on the end of a garden hose. When the end of a garden house is completely open, the waterflow is slow and broad. When you stick your thumb over the end of the hose, the same volume of water is still coming out, but the size of the hole is greatly reduced. The velocity of the water has to increase so the same volume of water is still coming out.” The faster, narrower jet of water has a higher erosion capability than the slow broad flow had.

“Naturally occurring rip currents also dig channels in the lake bottom, but typically they move up and down the shoreline so the erosion isn’t focused in one place. With a manmade structure, the resulting rip current is always in the same spot, consistently scouring the bottom of Lake Michigan.”

Davis acknowledges that a homeowner confronted with severe shoreline erosion can be in for a “very difficult time. The problems are complicated, and the solutions can be expensive.” He said his office and the US Army Corps, Detroit District, could be consulted for “possible recommendations of what to do and what not to do.” As a starter, a person seeking help needs to be able to describe existing conditions on his property and adjacent properties. Shoreline protection structures vary widely. For example, is it an existing concrete seawall, a rock revetment, or wooden piling? The Army Corps or the DNR can help point a homeowner in the right direction, but “the state is not going to design your seawall. You will need to contact a competent coastal engineering firm to design an adequate structure capable of withstanding the wave and current conditions from Lake Michigan on that part of the coastline.”

State law requires a permit for a structure below the elevation of the ordinary high watermark. Davis indicates

“the DNR would review the proposed structure in relation to adjacent structures to make sure they’re compatible, to make sure they won’t disrupt the normal movement of sand along the shoreline which could create an erosion problem for an adjacent property owner. We want to make sure” the structure will not create a “worse situation either for yourself or for a neighbor.”

Davis Speaks to Great Lakes Coastal Hazards Workshop

by Steve Davis

In August, DNR and SEMA staff participated in the Great Lakes Coastal Hazard Mitigation Workshop in Traverse City, Michigan. The workshop provided an opportunity for state staff working on Great Lakes coastal hazard issues such as flooding and erosion to exchange information and methodologies. Indiana described for the audience four areas along its Lake Michigan shoreline currently experiencing erosion problems.

The Lakefront Park and Sanctuary lies within the western portion of Indiana’s coast, which is heavily armored by industrial development and the creation of manmade land extending into Lake Michigan. The Hammond area is essentially a nonerodable shoreline which has had dredge material, from the construction of the Hammond Marina, placed lakeward of the existing armor stone. The dredge material from the marina basin created a beach and bluff area which is now experiencing erosion. This loss is perceived as an erosion problem, even though there is no real threat to structures or the original shoreline, but there is the loss of the recreational beach. A solution in this area is to place beach nourishment lakeward of the Lakefront Park and Sanctuary to maintain the recreational beach.

The Town of Ogden Dunes is experiencing sand-starved conditions. The Port of Indiana was constructed in 1967 and has been trapping sand on its east side ever since. The NIPSCO power plant, located on the east side of the Port,

has been dredging the accumulating sand and by-passing 75% around to Ogden Dunes. The solution at Ogden Dunes has been to construct sheet steel seawalls to protect the residential structures when the by-passed sand is unable to maintain a beach along the community during periods of high lake levels, as have been experienced this year.

The Town of Beverly Shores had 13,000 feet of rock revetment placed along Lake Front Drive by the US Army Corps in 1974. Over the years, several areas of the rock revetment have failed, and the road undercut, requiring major repair to the road and to the revetment. In addition to these failures, there has also been normal settling and sinking of the stone into the sand lake bed. With the recent rise in lake level, and a lack of

vide the longest time of protection possible to the Mt. Baldy sand dunes, while still maintaining a usable recreational beach.

Indiana’s coast has a range of erosion hazard conditions with various causes and ways of dealing with the erosion. The “methods” for dealing with the erosion depend on the type of use of the shoreline. The form of the protection needs to be compatible with the intended use of the coast.



Beach Nourishment at Mt.Baldy 1996



The Lake Michigan Coastal Coordination Program is an effort by the State of Indiana to improve communications and cooperation among the agencies who participate in activities in the Lake Michigan coastal region. See <http://www.dnr.state.in.us/lakemich/index.htm>

Managing Editor	Jennifer Kane
Editors	Dawn Deady Stephen Lucas
Graphics Designer	Jeffrey S. Foreman
Contributions	Kathleen Lucas Paul Kohlhoff

Indiana Shorelines for Coastal Coordination is a quarterly publication of the Lake Michigan Coastal Coordination Program. Please direct questions, comments, or up-coming event information to:

Jennifer Kane, (317) 232-0156;
Jennifer_Kane_at_dnrln@ima.isd.state.in.us



INDIANA DEPARTMENT OF NATURAL RESOURCES
DIVISION OF WATER
402 WEST WASHINGTON STREET, ROOM W264
INDIANAPOLIS, INDIANA 46204-2743